Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A double-stranded RNA (ds-RNA) expression vector that comprises the following sequences (a) to~~(e)~~(e):

(a) the following nucleotide sequence (a-1) or (a-2):

(a-1) a nucleotide sequence encoding all or a part of the target gene; or

(a-2) a nucleotide sequence encoding DNA that hybridizes under stringent conditions to DNA consisting of a sequence complementary to the nucleotide sequence (a-1);

(b) a nucleotide sequence complementary to the nucleotide sequence (a) and an inverted repeat thereof; ~~and~~

(c) a sequence encoding a loop region and connecting the nucleotide sequence (a) to the nucleotide sequence (b)[[,]];

(d) a sequence that autocatalytically cleaves RNA located upstream of the nucleotide sequences (a) to (c); and

(e) a sequence that pauses RNA polymerase located downstream of the nucleotide sequences (a) to (c);

wherein the sequences are transcribed into RNA and thereby forming ds-RNA having a stem-loop structure and wherein the ds-RNA is capable of inducing RNA interference.

2. (Original) The ds-RNA expression vector according to claim 1, which further comprises a polymerase II promoter.

3. (Original) The ds-RNA expression vector according to claim 1, which further comprises a developmental-stage-specific promoter.

4. (Previously Presented) The ds-RNA expression vector according to claim 2, wherein the polymerase II promoter or developmental-stage-specific promoter is a cytomegalovirus (CMV) early gene promoter.

5. (Canceled)

6. (Currently Amended) The ds-RNA expression vector according to claim ~~5~~1, wherein the sequence that autocatalytically cleaves RNA is a ribozyme site which is a sequence capable of being autocatalytically cleaved by the ribozyme activity.

7. (Canceled)

8. (Currently Amended) The ds-RNA expression vector according to claim ~~7~~1, wherein the sequence that pauses RNA polymerase is a sequence of the MAZ domain.

9. (Previously Presented) The ds-RNA expression vector according to claim 1, wherein the nucleotide sequence (c) is as shown in SEQ ID NO: 2, 5, or 6.

10. (Previously Presented) The ds-RNA expression vector according claim 1, wherein the target gene is a disease-associated gene.

11. (Previously Presented) The ds-RNA expression vector according to claim 1, wherein the target gene is the Ski gene.

12. (Currently Amended) The ds-RNA expression vector according to claim ~~11~~9, wherein a part of the target gene is a 540 bp 5'-region of the Ski gene.

13. (Withdrawn) A target gene-knockdown animal, in which a ds-RNA for the target gene is expressed.

14. (Withdrawn) The animal according to claim 13, in which the ds-RNA for the target gene is tissue-specifically expressed.

15. (Withdrawn) The animal according to claim 13, which is a transgenic animal having a ds-RNA expression vector introduced therein and expressing ds-RNA for the target gene, or progeny thereof.

16. (Withdrawn) The animal according to claim 15, wherein the ds-RNA expression vector comprises the following sequences (a) to (c):

(a) the following nucleotide sequence (a-1) or (a-2):

(a-1) a nucleotide sequence encoding all or a part of the target gene; or

(a-2) a nucleotide sequence encoding DNA that hybridizes under stringent conditions to DNA consisting of a sequence complementary to the nucleotide sequence (a-1);

(b) a nucleotide sequence complementary to the nucleotide sequence (a) and an inverted repeat thereof; and

(c) a sequence encoding a loop region and connecting the nucleotide sequence (a) to the nucleotide sequence (b),

wherein the sequences are transcribed into RNA and thereby forming ds-RNA having a stem-loop structure.

17. (Withdrawn) The animal according to claim 13, wherein the target gene is a disease-associated gene, and the animal is an animal model for disease.

18. (Withdrawn) The animal according to claim 17, wherein the target gene is the Ski gene, and the disease is selected from the group consisting of neural tube closure defect, malformation of the iris, and hemorrhage in the head.

19. (Withdrawn) The animal according to claim 13, wherein the animal is a mouse.

20. (Withdrawn) A method for producing a target gene-knockdown animal, wherein a ds-RNA expression vector capable of expressing ds-RNA for the target gene is introduced to form ds-RNA for the target gene.

21. (Withdrawn) The method according to claim 20, wherein the ds-RNA expression vector comprises the following sequences (a) to (c):

(a) the following nucleotide sequence (a-1) or (a-2):

(a-1) a nucleotide sequence encoding all or a part of the target gene; or

(a-2) a nucleotide sequence encoding DNA that hybridizes under stringent conditions to DNA consisting of a sequence complementary to the nucleotide sequence (a-1);

(b) a nucleotide sequence complementary to the nucleotide sequence (a) and an inverted repeat thereof; and

(c) a sequence encoding a loop region and connecting the nucleotide sequence (a) to the nucleotide sequence (b),

wherein the sequences are transcribed into RNA and thereby forming ds-RNA having a stem-loop structure.

22. (Withdrawn) The method according to claim 20, wherein the target gene is a

disease-associated gene, and the animal is an animal model for disease.

23. (Withdrawn) The method according to claim 22, wherein the target gene is the Ski gene, and the disease is selected from the group consisting of neural tube closure defect, malformation of the iris, and hemorrhage in the head.

24. (Withdrawn) The method according to claim 20, wherein the animal is a mouse.

25. (Previously Presented) An animal cell having the ds-RNA expression vectors according to claim 1 introduced therein.